



SEQUENCE LISTING

<110> SARCABAL, PATRICIA
CROUX, CHRISTIAN
SOUCAILLE, PHILIPPE

<120> METHOD FOR PREPARING 1,3-PROPANEDIOL BY A RECOMBINANT
MICRO-ORGANISM IN THE ABSENCE OF COENZYME B12 OR ONE OF
ITS PRECURSORS

<130> CHEP:004US

<140> 10/043,639

<141> 2002-01-09

<150> PCT/FR00/01981

<151> 2000-07-07

<150> FR 99/08939

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<170> PatentIn Ver. 2.1

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25

30

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35

40

45

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Val Ile Lys Glu Leu Lys Lys Asp Ser Val Gln Tyr Arg Arg Ser Asn
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Gly Gly Ile Thr Leu Ser Gly Gly Glu Val Leu Leu Gln Pro Asp Phe
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Ala Val Glu Leu Leu Lys Glu Cys Lys Ser Tyr Gly Trp His Thr Ala
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Ile Glu Thr Ala Met Tyr Val Asn Ser Glu Ser Val Lys Lys Val Ile
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Pro Tyr Ile Asp Leu Ala Met Ile Asp Ile Lys Ser Met Asn Asp Glu
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Ile His Arg Lys Phe Thr Gly Val Ser Asn Glu Ile Ile Leu Gln Asn
195 200 205

Ile Lys Leu Ser Asp Glu Leu Ala Lys Glu Ile Ile Ile Arg Ile Pro
210 215 220

Val Ile Glu Gly Phe Asn Ala Asp Leu Gln Ser Ile Gly Ala Ile Ala
225 230 235 240

Gln Phe Ser Lys Ser Leu Thr Asn Leu Lys Arg Ile Asp Leu Leu Pro
245 250 255

Tyr His Asn Tyr Gly Glu Asn Lys Tyr Gln Ala Ile Gly Arg Glu Tyr
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Ser Leu Lys Glu Leu Lys Ser Pro Ser Lys Asp Lys Met Glu Arg Leu
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<211> 385

<212> PRT

<213> Clostridium butyricum

<400> 8

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Lys Ala Leu Ile Val Thr Asp Lys Phe Leu Lys Asp Met Glu Gly Gly
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Ala Val Glu Leu Thr Val Lys Tyr Leu Lys Glu Ala Gly Leu Asp Val
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Val Tyr Tyr Asp Gly Val Glu Pro Asn Pro Lys Asp Val Asn Val Ile
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Glu Gly Leu Lys Ile Phe Lys Glu Glu Asn Cys Asp Met Ile Val Thr
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Val Gly Gly Gly Ser Ser His Asp Cys Gly Lys Gly Ile Gly Ile Ala
100 105 110

Ala Thr His Glu Gly Asp Leu Tyr Asp Tyr Ala Gly Ile Glu Thr Leu
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Val Asn Pro Leu Pro Pro Ile Val Ala Val Asn Thr Thr Ala Gly Thr
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Ala Ser Glu Leu Thr Arg His Cys Val Leu Thr Asn Thr Lys Lys Lys

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Asn Asp Pro Met Leu Met Val Lys Lys Pro Ala Gly Leu Thr Ala Ala						
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Thr Gly Met Asp Ala Leu Thr His Ala Ile Glu Ala Tyr Val Ser Lys						
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Asp Ala Asn Pro Val Thr Asp Ala Ser Ala Ile Gln Ala Ile Lys Leu						
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Ala Arg Glu Asn Met Ala Tyr Ala Ser Leu Leu Ala Gly Met Ala Phe						
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His Val Glu Arg Tyr Asn Met Leu Ser Asn Pro Lys Lys Phe Ala Asp						
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Glu His Met Ala Glu Leu Ala Leu Leu Asp Gly Asn Ala Phe Ser Asn						
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Primer

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DATE: 04/24/2003

PATENT APPLICATION: US/10/043,639A

TIME: 16:21:33

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3 <110> APPLICANT: SARCABAL, PATRICIA
 4 CROUX, CHRISTIAN
 5 SOUCAILLE, PHILIPPE
 7 <120> TITLE OF INVENTION: METHOD FOR PREPARING 1,3-PROPANEDIOL BY A RECOMBINANT
 8 MICRO-ORGANISM IN THE ABSENCE OF COENZYME B12 OR ONE OF
 9 ITS PRECURSORS
 11 <130> FILE REFERENCE: CHEP:00405
 12 <140> CURRENT APPLICATION NUMBER: 10/043,639A
 C--> 14 <141> CURRENT FILING DATE: 2003-04-12
 16 <150> PRIOR APPLICATION NUMBER: PCT/FR00/01981
 17 <151> PRIOR FILING DATE: 2000-07-07
 19 <150> PRIOR APPLICATION NUMBER: FR 99/03939
 20 <151> PRIOR FILING DATE: 1999-07-09
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 34 caaacagaa ggcagcaga atttttaaga agagcatttg cattgaaaca catacttgaa 180
 35 aatataccta taacaaattg agatcaagaa ctatagtggt gaagttttaa taaagaacca 240
 36 aggtctttaa aagtatttcc tgagttttct aataagtggt tacaagatga attggataga 300
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 38 gatgtctttg agtatggaa tggaaagaca abaagtgagt tagcaacttc atatatgaca 420
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88 attgaacacg caatgtatgt taatagtcaa tctgtaaaaa aagtaattcc atatatagat 540
89 ctggctatga ttgatataaa aagtatgaat gatgaaaatc ataggaaatt tacaggagtg 600
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91 atcagaattc ctggaataga aggatttaat gcagatttac aaagtatagg agcaatagct 720
92 caattttcaa aatcattaac aaattttaa agaatagac ttcttccata ccataattat 780
93 ggagaaaaata agtatcaagc aattggaaga gagtattctt tgaaagaact aaaatcacct 840
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97 <210> SEQ ID NO: 3

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101 <213> ORGANISM: Clostridium butyricum

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/043,639A

DATE: 04/24/2003

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227 <113> ORGANISM: Clostridium butyricum

228 <400> SEQUENCE: 6

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234 35 40 45
235 Arg Ala Leu Ala Leu Lys His Ile Leu Glu Asn Ile Pro Ile Thr Ile
236 50 55 60
237 Arg Asp Gln Glu Leu Ile Val Gly Ser Leu Thr Lys Glu Pro Arg Ser
238 65 70 75 80
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240 85 90 95
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242 100 105 110
243 Ser Lys Glu Lys Leu Lys Asp Val Phe Glu Tyr Trp Asn Gly Lys Thr
244 115 120 125
245 Thr Ser Glu Leu Ala Thr Ser Tyr Met Thr Glu Glu Thr Arg Glu Ala
246 130 135 140
247 Val Asn Cys Glu Val Phe Thr Val Gly Asn Tyr Tyr Tyr Asn Gly Val
248 145 150 155 160
249 Gly His Val Ser Val Asp Tyr Lys Val Leu Arg Val Gly Phe Asn Gly
250 165 170 175
251 Ile Ile Asn Glu Ala Lys Glu Gln Leu Glu Lys Asn Arg Ser Asp Pro
252 180 185 190
253 Asp Phe Ile Lys Lys Glu Lys Phe Leu Asn Ser Val Ile Ile Ser Cys
254 195 200 205
255 Glu Ala Ala Ile Thr Tyr Val Asn Arg Tyr Ala Lys Lys Ala Lys Glu
256 210 215 220
257 Ile Ala Asp Asn Thr Ser Asp Ala Lys Arg Lys Ala Glu Leu Asn Glu
258 225 230 235 240
259 Ile Ala Lys Ile Cys Ser Lys Val Ser Gly Glu Gly Ala Lys Ser Phe
260 245 250 255
261 Tyr Glu Ala Cys Gln Leu Phe Trp Phe Ile His Ala Ile Ile Asn Ile
262 260 265 270

```

VERIFICATION SUMMARY

DATE: 04/24/2003

PATENT APPLICATION: US/10/043,639A

TIME: 16:21:34

Input Set : D:\Chep004.app

Output Set: N:\CRF4\04242003\J043639A.raw

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date